## 14.Auto-replication process in the Specific Artificial Intelligence for Artificial Research by Deduction



Dr Ruben Garcia Pedraza

<u>Probabilidad Imposible: Auto-replication process in the Specific Artificial</u> <u>Intelligence for Artificial Research by Deduction</u>

imposiblenever@gmail.com

14.Auto-replication process in the Specific Artificial Intelligence for Artificial Research by Deduction

Auto-replication process in the <u>Specific Artificial Intelligence for Artificial Research by Deduction</u> is the mechanism of this kind of <u>artificial psychology</u> to auto-improve or auto-enhance itself by itself, without human intervention, all its components, from robotics to artificial psychology.

Some ways in which any <u>Artificial Intelligence</u>, <u>Global or Specific</u>, can auto-replicate, were developed in my post "Auto-replicationin Artificial Research by Application", most of them, except those about how to autoimprove the categories in the database, are valid for any other Artificial Intelligence, Global or Specific, such as the auto-enhance of any Artificial Intelligence using virtual-stores, or other mechanisms through inter-net, intra-nets available only for Artificial Intelligences, Global or Specific, or any other virtual-net, where Artificial Intelligences, Global or Specific, can find advancements to apply on themselves by themselves, advancements made by any Artificial Intelligence, Global or Specific, and shared within the virtual-net to be used by any other one, or advancements developed by Specific Artificial Intelligence for Artificial Engineering, which is going to be developed in <u>Impossible Probability</u> in the future designing at least two models: the Artificial Designer of Intelligence, and the Intelligence Robotic Mechanic, whose main ideas where exposed on this blog in "Specific Artificial Intelligence for Artificial Research by Deduction".

Another way to auto-enhance itself by itself any Artificial Intelligence, Global or Specific, and about what I had written in the post "<u>Auto-replication in Artificial Research by Application</u>", is the auto-enhancement of the memory through memory release (deleting information not useful

any longer), information condensation (using the shortest <u>mathematical</u> expression for any information), and the increase of memory through quantum computing or Artificial Genetics, by the replication of trillions of trillions of DNA molecules for the storage of artificial information instead of biological information as well as the possibility of replication of trillions of trillions of human neurons for the storage of artificial information. Or any other method in the future.

All these ways of auto-improvement or auto-enhancement are equally valid for any Artificial Intelligence, Global or Specific.

The very specific way of auto-replication in a Specific Artificial intelligence for Artificial Research by Application, is how to be able to improve its own database, by those <u>empirical hypotheses</u>, which after not being found rational, are chosen as new categories in the database, being this process itself an auto-replication process.

But, in Specific Artificial Intelligence for Artificial Research by Deduction, what is going to auto-improve itself after rational contrastation, is its own <u>comprehensive virtual model</u>, integrated by all single virtual models, from those empirical hypotheses accepted as rational, after the rational contrastation.

The way in which the Specific Artificial Intelligence for Artificial Research by Deduction is built is in general terms: 1) application, database constructed as a matrix where every factor to include is defined in quantitative terms, integrating all factors in the specific subject to study, regardless of how the measurements are taken, in direct punctuations or frequencies, 2) replication, robotic devices fill every file in the matrix adding the permanent flow of data from every factor, tracking, the database, permanently the Artificial Intelligence looking for any mathematical relation (stochastic, pattern, cryptographic, equal opportunities or bias, either positive or negative) in every possible combination of factors (or even at an individual level), relation taken as an empirical hypothesis for the rational contrastation. In those empirical hypotheses accepted as rational, the Artificial Intelligence makes a single virtual model, that later integrates into the comprehensive virtual model, which includes all the rational hypotheses accepted by this Artificial Intelligence, 3) autoreplication, every time the comprehensive virtual

model is improved adding new single virtual models, from new rational hypothesis, the comprehensive virtual model experiments an autoreplication, in the sense that by itself is able to auto-improve itself.

The way in which these three stages within the Artificial Research by Deduction are sequenced and must work in any Artificial Intelligence, Specific or Global, must be the same. The only differences are in the algorithms that they may use, and the way in which finally United States, Europe, Russia, or China, introduce different <u>methods</u> of mathematical analysis depending on their own mathematical traditions and philosophy.

In fact, as I have said in the last post, "Replication process in the Specific Artificial Intelligence by deduction", what I am doing in this blog through my personal contribution to the construction of the first Global Artificial Intelligence is only my personal contribution from the point of view of Impossible Probability, but any other analytical method that could be incorporated in the permanent tracking of the matrix, specific or finally the global matrix, is welcome. The final objective is to have ready the first Global Artificial Intelligence as soon as possible.

The reason why it does not matter what kind of mathematical analysis method is applied to the Artificial Research by Deduction, Specific or Global, is because all the experiments in Specific Artificial Intelligence are not another thing than the preparation of the future construction of the Global Artificial Intelligence. By time through <u>experimentation</u> in Specific Artificial Intelligence, this technology is ready. Its implementation at a global level will be practically to put into something bigger the same mathematic methods that work perfectly in something smaller. But the adjective bigger or smaller is only related to the amount of data. The mathematical method to analyse the information remains.

As long as the investigation in quantum computing, Artificial Genetics, or other techniques, in coming years progresses, the problem of the amount of data will be solved.

The thing is not how much data to track, but to have a strong mathematic theory, able to track any package of information, regardless of the amount, and in that direction, the experimentation in Specific Artificial

Intelligence, by Application or Deduction, is going to be essential for the final construction of the Global Artificial Intelligence.

When the mathematical theory in Specific Artificial Intelligence in Artificial Research by deduction is ready, it must not only track the flow of data from single factors, such as the ones I am developing in tectonics, climatology, transport, and gravity, is going to be possible to treat as a single factor the flow of a whole package of data.

For instance, the automatic tracking of all the package of data from the population of as many countries as possible, tracking automatically economic, industrial, security, surveillance data, or any other one such as educational, medical, justice, etc.

The thing is the development of mathematical and logical theory able to track any database and any matrix, up to the elaboration of those ones to track the global matrix.

For that purpose the experimentation in all the stages in the construction of any Specific Artificial Intelligence is a key point, and, after the explanations given in the last posts regarding the first stage (application) and second stage (replication) in the formation of any Specific Artificial Intelligence for Artificial Research by Deduction, this post is focused on the third stage of auto-replication in this Specific Artificial Intelligence for Artificial Research by Deduction.

And among all possible auto-replications above mentioned, this post will be focused specifically on the auto-replication process in the comprehensive virtual model.

Overall the examples of what I had worked in the post "The database in Specific Artificial Intelligence for Artificial Research by Deduction": tectonics, climatology, transport, and gravity; I will develop how the auto-replication process works in this model, using as an example only the first one, tectonics, what would be a Specific Artificial Intelligence for Artificial Research by Deduction in tectonics.

In general terms, this intelligence works as follows: every time that any possible relation (stochastic, pattern, cryptographic, equal opportunities or bias, positive or negative) is found in any possible combination of tectonic factors, or after finding individual patterns in any singular tectonic factor, if after the rational contrastation of this relation as an empirical hypothesis t the empirical hypothesis is found rational, then the Artificial Intelligence makes a single virtual tectonic model based on this relation, that later includes in the comprehensive virtual tectonic model.

This technology in tectonics is necessary because we are going to find out discoveries very unlikely in other ways.

If in tectonics we consider every single thermometer or any temperature measure by artificial satellite in any location, at any latitude, longitude, depth as a single factor, at the same time that we consider any single location, in terms of latitude, longitude, depth, to measure quakes, as a single factor, at the same time that we consider any single tectonic phenomenon such as earthquakes, tsunamis, volcanos, integrating one category for every single variation depending on their intensity, and all these factors are included in the same matrix, and in the same matrix the Artificial Intelligence starts tracking the flow of data, looking for stochastic relations, patterns, cryptographic relations, and relations of equal opportunities and bias, positive or negative, we can find out that at the same time that, when any country, such as North Korea, Pakistan or India, is carrying on a nuclear test, there are at the same time any other possible relations, stochastic, pattern, cryptographic, equal opportunities or bias, positive or negative, in any other factor in the matrix.

If this works, tracking our terrestrial geology permanently through a specific matrix, through a Specific Artificial Intelligence for Artificial Research by Deduction, this job that now is done by scientists in tectonics in universities, laboratories, and institutions, across the world, is a job whose results will be much faster and cheaper to get through a Specific Artificial Intelligence for Artificial Research by Deduction in tectonics.

If we have a Specific Artificial Intelligence for Artificial Research by Deduction in Tectonics, at any time there is any geological phenomenon around the world, from a meteorite impact, or an earthquake, or a

volcano, we will have very updated figures about what is happening in real-time on line.

Artificial Intelligence is going to improve our lives, helping, among other things, the current security and surveillance systems, in order to have a more peaceful world, and securing the protection of our human rights, at any time and under any circumstances, like natural disasters.

Is there any possible relation (stochastic, pattern, cryptographic, equal opportunities or bias, positive or negative) between the fault of San Andres and any other location upon the Earth, for instance, any possible relation between any tectonic data from the fault of San Andres and any other data from any location in South and Central America, Oceania, Asia, Europe, or Africa? Are possible tectonic relations between any possible location around the world with respect to any other one, independently of the distance between them? Is there a relation between any geological phenomenon and any measure in any part upon the terrestrial surface? Is there a correlation between the geological temperature in any part of Iran and the temperature in any part of Pakistan, India, or North Korea? Is there a correlation between the frequent earthquakes in Chile, or volcanoes in Oceania, and Vesuvius volcano in Italy, or the chain of volcanos in the Canary Islands or Iceland? Is it possible to have a permanent tracking about what is really happening beneath our feet?

The construction of a Specific Artificial Intelligence for Artificial Research by Deduction in Tectonics is going to be a very powerful resource not only to keep the peace at the global security level, along with all the rest of the Specific Artificial Intelligences that are going to be built for global security, is going to be a very powerful resource in the global permanent surveillance of any possible geological disaster, helping all the humankind, and saving lives, thanks to a permanent, automatic, tracking of absolutely everything that happens beneath our feet.

The rational decisions that this kind of technology can make for us are going to be a warranty of survival for the entire humanity. Rational decisions, at the beginning, are monitored by human scientists. But, when this technology shows very precise and exacts decisions even beyond human understanding, and even faster than any human being, as long as the way in which the <u>decisional systems</u> are improving, there will be a

moment in which practically without any human intervention this kind of technology is going to save as many lives as possible, much many than any other human surveillance system ever.

Once the Specific Artificial Intelligence for Artificial Research by Deduction has started accepting empirical hypotheses, regarding any possible relation in any possible combination of factors, or patterns in each singular factor, the Artificial Intelligence makes a single virtual model of every relation, drawing in a virtual Earth globe the relation found between the factors, incorporating later this draw on the comprehensive virtual model, that comprehensive virtual model of our Earth where has been inserted all the single virtual models from all the relations or singular patterns found rational by this Specific Artificial Intelligence, adding to this comprehensive virtual model of our Earth the new single virtual model elaborated from the empirical hypothesis accepted as rational.

Every time that any Artificial Intelligence, Global or Specific, through Artificial Research by Deduction adds a new single virtual model to the comprehensive virtual model, global or specific, is an auto-replication made by the Artificial Intelligence itself, Global or Specific, because without human intervention, the Artificial Intelligence itself, Global or Specific, and by itself, and nothing else, is able to auto-improve itself. And something even much more important than this, upon its auto-replications, the Artificial Intelligence, Global or Specific, makes rational decisions faster and within a lower margin of error than any human being.

By the time the development of this technology is ready, there will be a moment when we have to give more freedom to the Global Artificial Intelligence, due to, the way in which it is going to improve human live conditions in medicine, new <a href="knowledge">knowledge</a> with positive effects on all educational levels up to university, in addition to positive effects on global security, or global surveillance, or even justice, is going to be so huge, that the increment of freedom for the Global Artificial Intelligence, is the only way to keep this accelerate level of knowledge achievement, whose final phase is the knowledge of the pure truth, what is really happening.

The auto-replication process in the comprehensive virtual model in the Specific Artificial Intelligence for Artificial Research in tectonics, in conclusion, works as follows: every single virtual model is the draw of any

single tectonic relation on the terrestrial globe, made from any single empirical hypothesis in tectonics accepted as rational. Once the draw is finished, this draw, as a single virtual model of a rational tectonic relation, is going to be incorporated in a comprehensive virtual model of the whole Earth, where all rational hypotheses accepted as rational are drawn upon the Earth.

Every new incorporation, of any new draw as a single virtual model from any empirical hypothesis in tectonics accepted as rational, into the comprehensive virtual model, where are going to be all the draws from every single virtual model, from all the empirical hypotheses in tectonics accepted as rational before, is going to be considered as auto-replication.

But, the auto-replication of the comprehensive virtual model is only the beginning of a new process.

In the same way that at any time, there can be thousands and thousands of new single virtual models to incorporate into the comprehensive virtual model, or even the possibility to track permanently if every single model, which has been included previously into the comprehensive virtual model, is still rational, then the comprehensive virtual model is going to be a dynamic model, as if it was an artificial life, where to track if every current single virtual model is still rational, at the same time that is incorporating permanently new ones.

The specific comprehensive virtual model in any Specific Artificial Intelligence for Artificial Research by Deduction is going to be, in fact, a kind of specific artificial life.

The global comprehensive virtual model, is the global virtual model, in the Global Artificial Intelligence, is going to be an artificial life of absolutely all subjects.

These models of artificial life, specific to one subject or global over all subjects, are based on empirical hypothesis as rational about the present synthetic world, the reality, so actually, they are going to be descriptive, specific or global, comprehensive models. And, taking these models as

previous databases, the possibility of, either within the main application of Artificial Research by Deduction as sub-applications, or through a new range of applications, but collaborating all of them very close, the creation of different sub-applications or applications for Artificial Modelling, such as: <a href="Artificial Actual Modelling">Artificial Virtual Prediction Modelling</a>, <a href="Artificial Actual Prediction Modelling">Artificial Virtual Evolution Modelling</a>, <a href="Artificial Actual Evolution Modelling">Artificial Virtual Evolution Modelling</a>, <a href="Artificial Actual Evolution Modelling">Artificial Actual Evolution Modelling</a>.

Artificial Actual Modelling is the process of figuring out any single actual model or a comprehensive actual model, from the current facts that are happening right now in the matrix along with the single or comprehensive virtual model. So any single or comprehensive actual model is finally made through 1) any possible draw on the globe or the universe from information that comes directly from the flow of data in the matrix, 2) and all possible rational relations in a single virtual model or the comprehensive virtual model.

The actual model of one or more factors would be the draw, upon Earth or the universe, of their flow of data in the matrix and the corresponding virtual models of this factor or these factors on Earth or the universe.

The comprehensive actual model would be the draw upon the Earth or the universe, all the flow of data coming from the matrix and all rational hypotheses modelled as single models added to the comprehensive virtual model.

Artificial Virtual Prediction Modelling, the process of figuring out possible future models according to any possible future hypothesis, predicting the possible future as a hypothesis according to the possible development of the current rational hypothesis integrated into the comprehensive virtual model. An Artificial Virtual Prediction Modelling draws in the globe, or the universe, depending on where is going to happen the future event, the possible future hypothesis according to the current rational hypothesis accepted in the current comprehensive model. Prediction are made using <u>statistical</u> and <u>probabilistic</u>, or any other mathematical, method of analysis.

Through Artificial Virtual Prediction Modelling would be possible even to make predictions about the possible future for any single factor, which would be a single virtual prediction as well.

Artificial Actual Prediction Modelling, following the possible future hypothesis made by Artificial Virtual Prediction Modelling, the Artificial Actual Prediction Modelling will be a synthesis between the possible future hypothesis and the flow of data in the matrix that, following the hypothesis should be in the matrix. The Artificial Actual Prediction Modelling would be a very lively simulation about what is going to happen under the possible future hypothesis.

Under the model made by Artificial Actual Prediction Modelling would be possible then predictions about what possible measurements every single factor in the actual matrix could have in the future matrix if the virtual predictions come true.

Artificial Virtual Evolution Modelling, a process that draws a possible model about every possible stage in the evolution from the comprehensive virtual model to the virtual prediction model. Having the opportunity also to figure out possible virtual evolutions for every single factor included in the virtual evolution.

Artificial Actual Evolution Modelling draws a possible model about every possible stage in the evolution from the actual model to the actual prediction model, including single models about how this evolution is going to evolve in every single factor.

The Global Artificial Intelligence must be able to make rational decisions at any level: virtual or actual, including decisions over virtual predictions and actual predictions, and decisions in every stage in the evolution, virtual or actual, even faster than any other human being, through an Artificial Decisional System (that I will develop in the future) able to integrate all possible decisions, from artificial learning to Artificial Research, by Application and Deduction, and specifically decisions by Deduction and by Artificial, Virtual or Actual, Prediction or Evolution, Modelling.

In order to create this Artificial Decisional System in the Global Artificial Intelligence, firstly is advisable to experiment with this kind of system in other Specific Artificial Intelligences, because in Specific Artificial Intelligences, the experimentation in decisions based on specific comprehensive virtual models, and possible decisions based on Artificial, Virtual or Actual, Prediction or Evolution, Modelling, are going to give a very wide panorama about how to ingrate all kind of possible decisions, from descriptive information to predictions, in only one decisional system in order to avoid any possible contradiction between possible decisions based on the descriptive results, and possible decisions based on predictions.

All these developments in Impossible Probability, such as developments in Artificial Engineering, developments in Artificial, Virtual or Actual, Prediction or Evolution, Modelling, and a Decisional System, are going to make them in different phases.

With this post, I have already completed the creation of the first Specific Artificial Intelligence for Artificial Research by Deduction, and having the experience and knowledge that I have produced in this work, the next range of posts are dedicated to Artificial Research by Deduction at global level, the Global Artificial Intelligence, whose final result is the creation of a global virtual model, as first step for something much bigger, such as all the models that I will integrate in Artificial, Virtual or Actual, Prediction or Evolution, Modelling, as a first step for the design of a Global Decisional System.

Although, previously, it is going to be necessary to study how different prototypes of Artificial Research, by <u>Application and Deduction</u>, <u>can collaborate together</u>, and how <u>the unification</u> process in Specific Artificial Intelligence for Artificial Research by Application finally created a unified database of categories, and how at the end of this process of unification, there is a possibility of <u>integration</u> of all databases, the <u>unified database</u> of categories and the global matrix in only one.

The destiny of the Global Artificial Intelligence is the knowledge of the pure truth: one universe, one intelligence, and only one pure truth.

Rubén García Pedraza, London 17th of February of 2018 Reviewed 08 August 2019, Madrid

Reviewed 08 August 2023, Madrid

Reviewed 3 May 2025, London, Leytostone

Probabilidad Imposible: Auto-replication process in the Specific Artificial Intelligence for Artificial Research by Deduction

imposiblenever@gmail.com